

Access DB# 88371

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jeff Fredman Examiner #: 72610 Date: 3/6/03  
Art Unit: 1634 Phone Number 308-6568 Serial Number: 01/770-744  
Mail Box and Bldg/Room Location: 11<sup>th</sup> floor Results Format Preferred (circle): PAPER DISK E-MAIL  
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**If more than one search is submitted, please prioritize searches in order of need.**  
\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search Structures  
of claim 1.

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Searcher: <u>Sheppard</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: <u>308-4499</u>	AA Sequence (#) _____	Dialog _____
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Date Completed: <u>3/11/03</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

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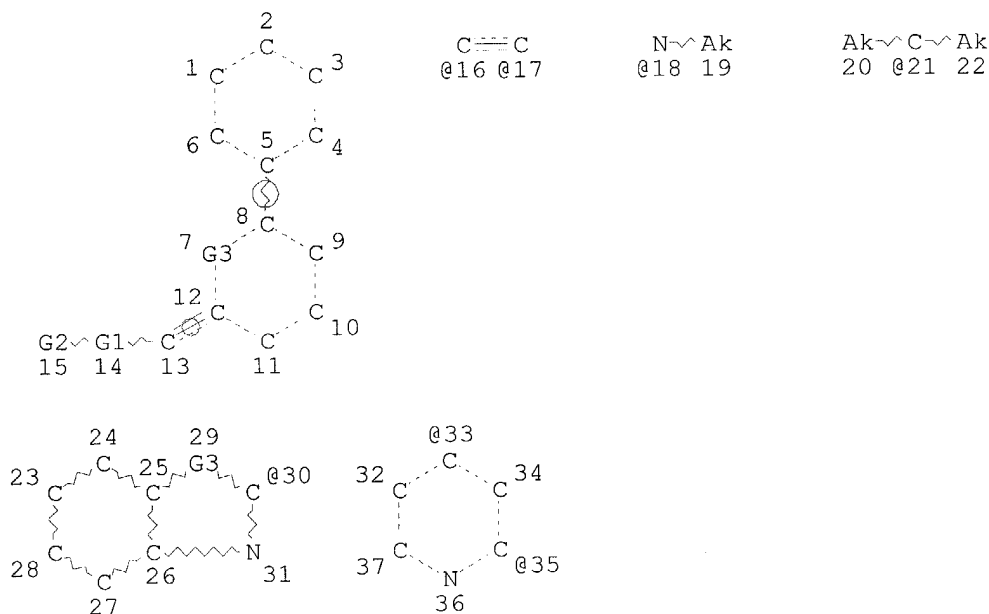
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FILE COVERS 1907 - 11 Mar 2003 VOL 138 ISS 11  
 FILE LAST UPDATED: 10 Mar 2003 (20030310/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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 L7 STR



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 DEFAULT ECLEVEL IS LIMITED

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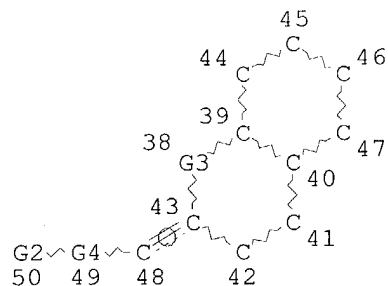
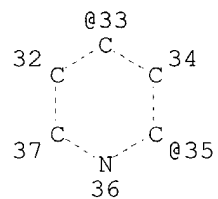
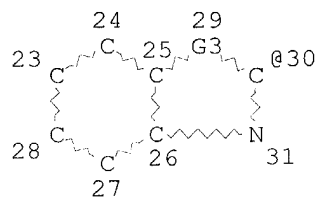
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@18 19

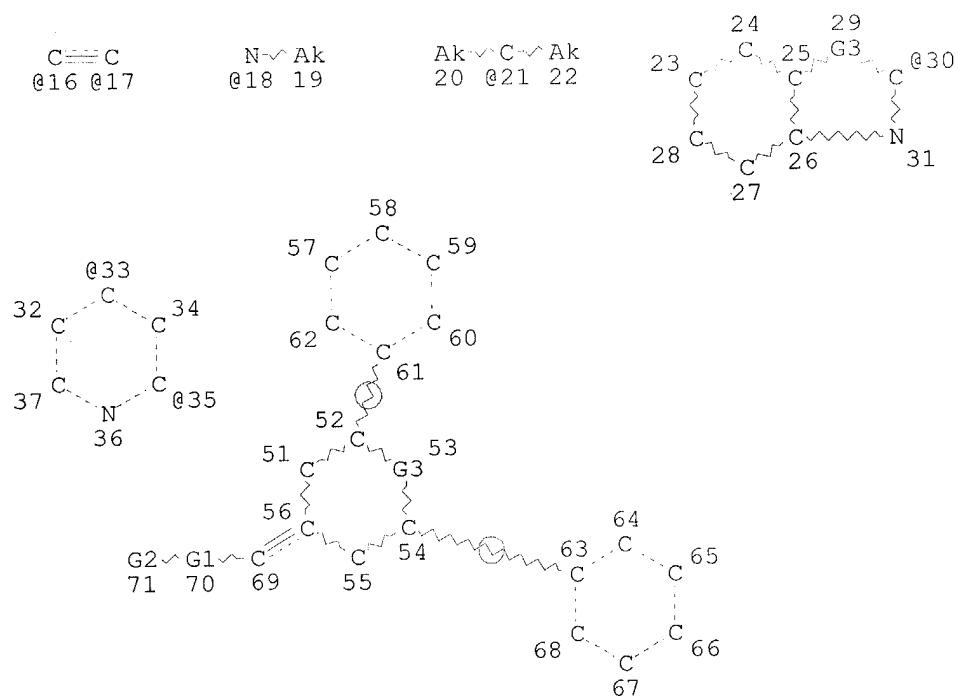
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NSPEC IS R AT 48  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 35

STEREO ATTRIBUTES: NONE  
L15 STR



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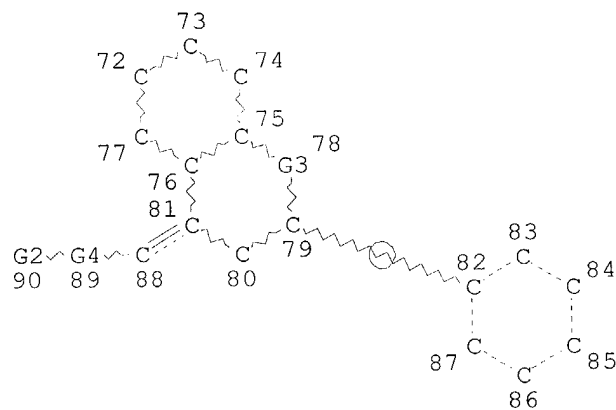
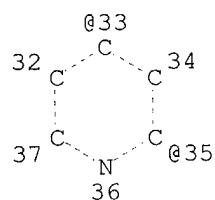
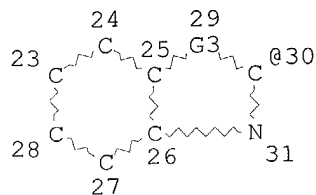
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 NUMBER OF NODES IS 43

STEREO ATTRIBUTES: NONE  
 L17 STR

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N~Ak  
@18 19

Ak~C~Ak  
20 @21 22



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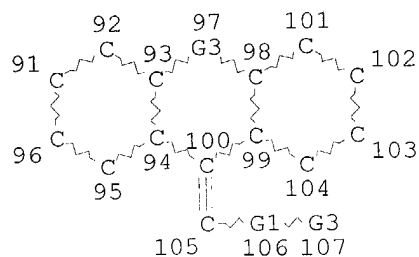
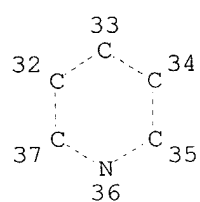
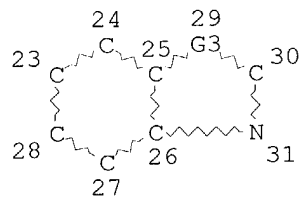
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NUMBER OF NODES IS 41

STEREO ATTRIBUTES: NONE  
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N~Ak  
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Ak~C~Ak  
20 @21 22



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VAR G3=O/S/SE/18/21

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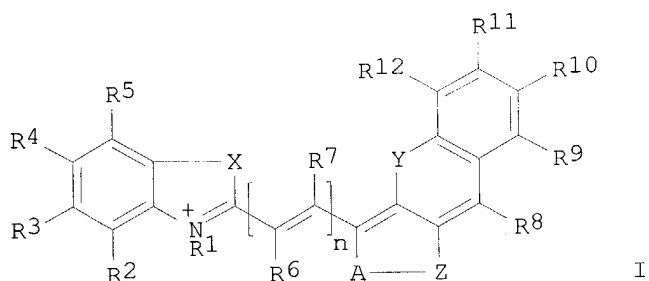
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 L39 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L24

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L39 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2000:646079 HCAPLUS  
 DOCUMENT NUMBER: 133:239376  
 TITLE: Laser-compatible NIR marker dyes  
 INVENTOR(S): Czerney, Peter; Lehmann, Frank  
 PATENT ASSIGNEE(S): Dyomics, Germany  
 SOURCE: PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000053678	A1	20000914	WO 2000-DE802	20000309
W: DE, US				
DE 19911421	A1	20001005	DE 1999-19911421	19990311
PRIORITY APPLN. INFO.:			DE 1999-19911421 A	19990311
OTHER SOURCE(S):		MARPAT 133:239376		
GI				



AB The aim of the invention is to provide NIR-marker polymethine dyes such as I (R1-R12 = H, org. group, OH, ionizable group; X, Y = O, S, Se, imino, dialkylmethylene; A, Z = H; AZ together may form an aliph., heteroaliph., lactone, or thiolactone linkage; n = 1-3) with high photochem. and storage stability as well as high fluorescence yield, in which fluorescence can be excited as simply as possibly by means of laser radiation in the visible or NIR spectral range. Thus, 3-(diethylamino)-6-(ethoxymethylene)-7,8,9,10-tetrahydro-6H-(5-oxoniacyclohepta[b]naphthalene) perchlorate was prepd. and converted to 3-(diethylamino)-6-[2-[1-(5-carboxypentyl)-3,3-

dimethyl-5-sulfonato-1,3-dihydro-2-indolylidenyl]ethylidene]-7,8,9,10-tetrahydro-6H-(5-oxoniacyclohepta[b]naphthalene) betaine. This compd. after esterification with N-hydroxysuccinimide could be used to label human serum albumin.

- IT **293320-49-7P**  
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (dye; prodn. of laser-compatible NIR fluorescent biomarker dyes)
- IT **293320-46-4P 293320-47-5P 293320-51-1P**  
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (dye; prodn. of laser-compatible NIR fluorescent biomarker dyes)
- IT **293320-44-2P 293320-45-3P 293320-48-6P 293320-53-3P**  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (dye; prodn. of laser-compatible NIR fluorescent biomarker dyes)
- REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:424422 HCAPLUS  
 DOCUMENT NUMBER: 127:184914  
 TITLE: New near-infrared-absorbing acidochromic dyes and their application in sensor techniques  
 AUTHOR(S): Czerney, Peter; Grummt, Ulrich -W.  
 CORPORATE SOURCE: Institut fuer Physikalische Chemie, Friedrich-Schiller-Universitaet Jena, Lessingstrasse 10, D-07743, Jena, Germany  
 SOURCE: Sensors and Actuators, B: Chemical (1997), B39(1-3), 395-400  
 CODEN: SABCEB; ISSN: 0925-4005  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

- AB New stable acidochromic near-IR absorbing dyes are described, which are useful for the design of optodes. The dyes belong to the classes of 2-(4-hydroxyphenyl)-1-benzopyrylium salts, 9-[3-(pyranylidene)propenyl]-7-diethylamino-1-benzopyrylium salts, 9-[3-(thiopyranylidene)- and 9-[3-(1-benzopyranylidene)propenyl]-acridinium salts, and 9-(4-dialkylaminostyryl)acridinium salts. Apparent pKa values in water/2-propanol mixts. are in the range 1.1 to 8.8. Absorption maxima of the long-wavelength absorbing forms span the region from 600 to 900 nm.
- IT **193958-15-5P**  
 RL: ARG (Analytical reagent use); DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)  
 (L 109; prepn. of stable acidochromic near-IR absorbing dyes for use in optodes)

L39 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:457525 HCAPLUS  
 DOCUMENT NUMBER: 125:234265  
 TITLE: Acidochromic, non-symmetric pyrylotrimethines as NIR sensor dyes and their absorption spectroscopic behaviors  
 AUTHOR(S): Czerney, P.; Grummt, U.-W.  
 CORPORATE SOURCE: Institut fur Physikalische Chemie, Friedrich-Schiller-Universitaet Jena, Jena, D-07743, Germany

SOURCE: Journal of Information Recording (1996), 23(1-2, 14th Conference Photochemistry Section of the Society of German Chemists, 1995, Pt. 2), 159-165  
CODEN: JIREFL; ISSN: 1025-6008  
PUBLISHER: Gordon & Breach  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
AB NIR (near infra red) indicator dyes for optodes are developed and synthesized to measure pH-value as well as potassium-, ammonium- or etc. They are useful for det. urea concn. in an aq. medium or ammonia in the air. The dyes can be used for information recordings.  
IT **181934-41-8 181934-43-0**  
RL: PRP (Properties)  
(acidochromic, nonsym. pyrylotrimethines as NIR sensor dyes and their absorption spectroscopic behaviors)

L39 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:314093 HCAPLUS  
DOCUMENT NUMBER: 124:346018  
TITLE: New near-infrared-absorbing non-symmetric and symmetric trimethinecyanine dyes containing a 7-dialkylamino-1-benzopyrylium end group  
AUTHOR(S): Czerney, Peter; Grummt, Ulrich-W.  
CORPORATE SOURCE: Inst. Physikalische Chemie, Friedrich-Schiller-Univ. Jena, Jena, D-07743, Germany  
SOURCE: Journal of Chemical Research, Synopses (1996), (4), 173  
CODEN: JRPSDC; ISSN: 0308-2342  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A series of 13 trimethinium dyes absorbing in the near-IR and having neg. solvatochromism and has been synthesized. Some of the dyes are are acidochromic and may be useful for pH sensing.

IT **99309-28-1P 177194-48-8P**  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(near-IR-absorbing trimethinecyanine dyes contg. a 7-(dialkylamino)-1-benzopyrylium end group with neg. solvatochromism)

L39 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:909371 HCAPLUS  
DOCUMENT NUMBER: 123:328758  
TITLE: Proton-carrier pH indicator dyes for the near infrared spectral region  
INVENTOR(S): Czerney, Peter; Grummt, Ulrich Walter; Lindauer, Heike; Mohr, Gerhard  
PATENT ASSIGNEE(S): Friedrich-Schiller-Universitaet Jena, Germany  
SOURCE: Ger. Offen., 11 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4341618	A1	19950608	DE 1993-4341618	19931207
PRIORITY APPLN. INFO.:			DE 1993-4341618	19931207
OTHER SOURCE(S): MARPAT 123:328758				

AB Anhydro bases of proton-carrier polymethine dyes with specified structures are converted to styrylcyanine, pyrylomethinecyanine, and benzopyrylomethinecyanine dyes as a function of pH. The dyes can be used



as indicators from pH 2 to 12. They can be applied to the surface of carrier substances, e.g. glass plates or polymer foils, and protected by long aliph. substituents against washing out. They can be used for detg. acids or bases, e. g. pollutants in gases or liqs. They can be applied with a light source (LED or diode laser) or photoreceiver (CCD element or multiplier). Absorption max. and pKa data of examples (in 1:1 H<sub>2</sub>O-isopropanol) are given.

IT 170143-93-8 170144-10-2

RL: ARG (Analytical reagent use); DEV (Device component use); PRP (Properties); ANST (Analytical study); USES (Uses)

(proton-carrier pH indicator dyes for the near IR spectral region)

IT 170143-89-2 170143-90-5 170144-06-6

170144-07-7

RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)

(proton-carrier pH indicator dyes for the near IR spectral region)

L39 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:529590 HCAPLUS

DOCUMENT NUMBER: 122:316900

TITLE: Near-infrared absorbing acidochromic nonsymmetric trimethinium dyes containing acridinium and pyrylium end groups

AUTHOR(S): Lindauer, Heike; Czerney, Peter; Grummt, Ulrich-W.

CORPORATE SOURCE: Inst. Physikalische Chem., Friedrich-Schiller Univ., Jena, Germany

SOURCE: Journal fuer Praktische Chemie/Chemiker-Zeitung (1995), 337(3), 216-21

CODEN: JPCCEM; ISSN: 0941-1216

PUBLISHER: Barth

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of new acidochromic dyes absorbing in the near-IR spectral region (up to 900 nm) has been synthesized with a systematic variation of the underlying nonsym. pyrylium trimethinium acridine structure. The dyes exhibit pKa values 5.7-6.7. Semiempirical MO calcns. were performed to elucidate the essentials of the chromophores.

IT 160115-50-4P 163403-60-9P 163403-63-2P

163403-75-6P 163403-80-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(near-IR absorbing acidochromic nonsym. trimethinium dyes contg. acridinium and pyrylium end groups)

L39 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:251104 HCAPLUS

DOCUMENT NUMBER: 122:58161

TITLE: New near infrared absorbing acidochromic dyes and their application in sensor techniques

AUTHOR(S): Lindauer, Heike; Czerney, Peter; Mohr, Gerhard J.; Grummt, Ulrich-W.

CORPORATE SOURCE: Inst. of Physical Chem., Friedrich-Schiller-Univ., Jena, 07743, Germany

SOURCE: Dyes and Pigments (1994), 26(3), 229-35

CODEN: DYPIDX; ISSN: 0143-7208

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

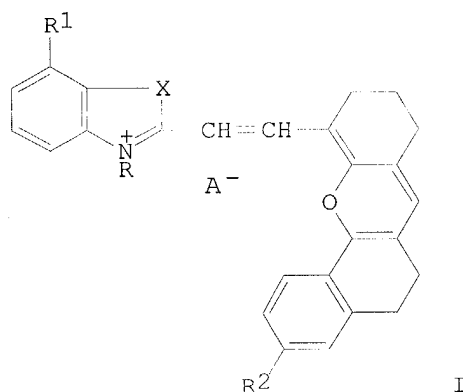
LANGUAGE: English

AB Two new acidochromic styrylcyanines and one new benzopyrylotrimethinium dye were described. Their visible and near-IR absorption spectra were recorded as a function of pH in fluid soln. and embedded in polymer layers. The layers proved to be useful as pH sensors.

IT 160115-50-4

RL: DEV (Device component use); USES (Uses)  
(near IR absorbing acidochromic dyes and their application in sensor techniques)

L39 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1990:534161 HCAPLUS  
DOCUMENT NUMBER: 113:134161  
TITLE: Near-infrared absorbing asymmetrical trimethine cyanine dyes  
AUTHOR(S): Gadzhev, N.; Deligeorgiev, T.  
CORPORATE SOURCE: Fac. Chem., Univ. Sofia, Sofia, 1126, Bulg.  
SOURCE: Dyes and Pigments (1990), 14(1), 73-77  
CODEN: DYPIDX; ISSN: 0143-7208  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB The synthesis of asym. trimethine cyanine dyes (I; R = Me, Et, allyl, hydroxyethyl; R1 = H; R2 = H, OMe; X = O, S, CH:CH, CMe2; R1X = CH:CH:CH:C; A = ClO4, Br, I) is described. The absorption max. of the dyes is within the range 687-793 nm.

IT 129296-81-7P 129296-83-9P 129296-84-0P  
129296-86-2P 129296-88-4P 129296-90-8P  
129296-92-0P 129490-15-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and near-IR absorption spectra of)

L39 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1986:98943 HCAPLUS  
DOCUMENT NUMBER: 104:98943  
TITLE: Quantum counting by laser dyes in a broad spectral range including the near-infrared region  
AUTHOR(S): Brecht, Eberhard  
CORPORATE SOURCE: Cent. Inst. Genet. Res. Cultiv. Plants, Ger. Acad. Sci., Gatersleben, DDR 4325, Ger. Dem. Rep.  
SOURCE: Analytical Chemistry (1986), 58(2), 384-7  
CODEN: ANCHAM; ISSN: 0003-2700  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Some laser dyes were examd. which could serve as quantum counters with an extended red response. The benzopyrylium salts CZ 144 and CZ 682 dissolved in CH2Cl2 have high molar absorptivities of 117,500 L mol<sup>-1</sup> cm<sup>-1</sup>

at 667 nm (CZ 144) and 131,800 L mol<sup>-1</sup> cm<sup>-1</sup> at 720 nm (CZ 682), relative quantum yields of fluorescence above 0.5, sufficient stability, low changes in fluorescence intensity over the temp. range from 16 to 32.degree., as well as only small polarization effects. The laser dye CZ 144 and, in a qualified sense, CZ 682 are suitable quantum counters to correct excitation spectra of fluorescence up to 700 and 780 nm, resp.

IT 99309-28-1

RL: PRP (Properties)  
(as quantum counter in solns.)

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This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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L40 1 L24

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L40 ANSWER 1 OF 1 CAOLD COPYRIGHT 2003 ACS

AN CA63:1914h CAOLD

TI heterocycles from amino ketones - (VII) cationic cyanines from  
2,3-condensed lepidines

AU Kempster, Gerhard; Dost, H.; Schmidt, W.

IT	1725-36-6	1725-37-7	1725-38-8	1725-39-9	1725-40-2	1725-41-3
	1725-42-4	1871-99-4	1872-00-0	1872-20-4	1872-21-5	1872-22-6
	1872-23-7	1872-24-8	<b>1872-25-9</b>	1872-26-0	1932-40-7	
	2004-43-5	2004-44-6	102960-07-6			

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STRUCTURE FILE UPDATES: 10 MAR 2003 HIGHEST RN 497818-02-7  
 DICTIONARY FILE UPDATES: 10 MAR 2003 HIGHEST RN 497818-02-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
 PROPERTIES for more information. See STNote 27, Searching Properties  
 in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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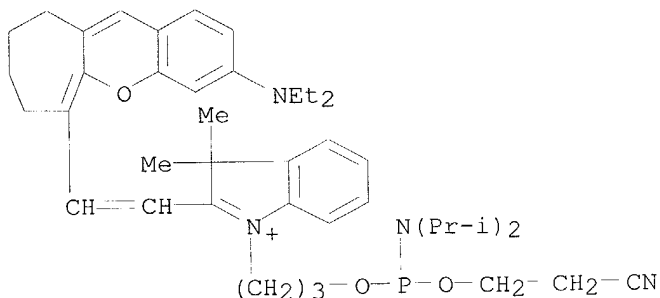
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L24 ANSWER 1 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 293320-53-3 REGISTRY  
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 cyanoethoxy)phosphino]oxy]propyl]-2-[2-[3-(diethylamino)-7,8,9,10-  
 tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-3,3-dimethyl-,  
 perchlorate (9CI) (CA INDEX NAME)  
 MF C42 H58 N4 O3 P . Cl O4  
 SR CA  
 LC STN Files: CA, CAPLUS

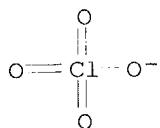
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CRN 293320-52-2  
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CM 2

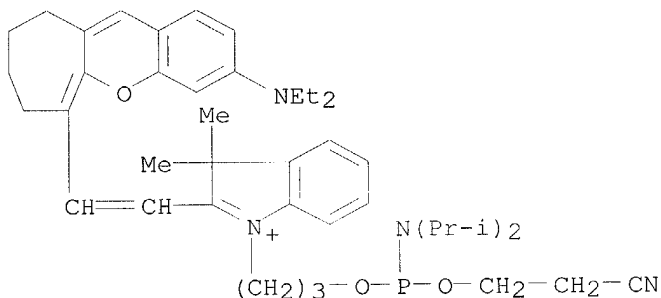
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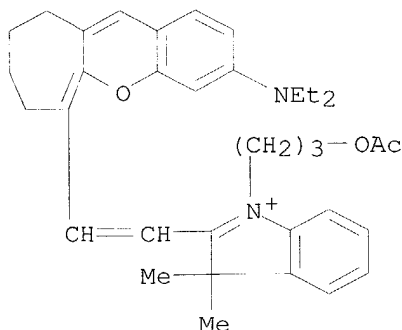
1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:239376

L24 ANSWER 2 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 293320-52-2 REGISTRY  
CN 3H-Indolium, 1-[3-[[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]oxy]propyl]-2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-3,3-dimethyl- (9CI)  
(CA INDEX NAME)  
FS 3D CONCORD  
MF C42 H58 N4 O3 P  
CI COM  
SR CA



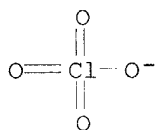
L24 ANSWER 3 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 293320-51-1 REGISTRY  
CN 3H-Indolium, 1-[3-(acetyloxy)propyl]-2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)  
MF C35 H43 N2 O3 . Cl O4  
SR CA  
LC STN Files: CA, CAPLUS  
  
CM 1  
  
CRN 293320-50-0  
CMF C35 H43 N2 O3



CM 2

CRN 14797-73-0

CMF C1 O4



1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:239376

L24 ANSWER 4 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 293320-50-0 REGISTRY

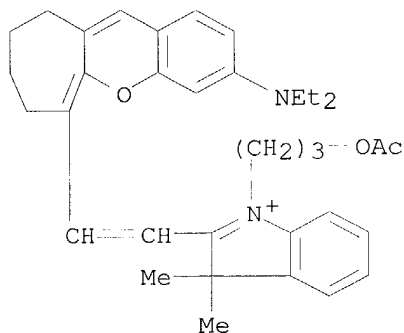
CN 3H-Indolium, 1-[3-(acetyloxy)propyl]-2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-3,3-dimethyl- (9CI)  
(CA INDEX NAME)

FS 3D CONCORD

MF C35 H43 N2 O3

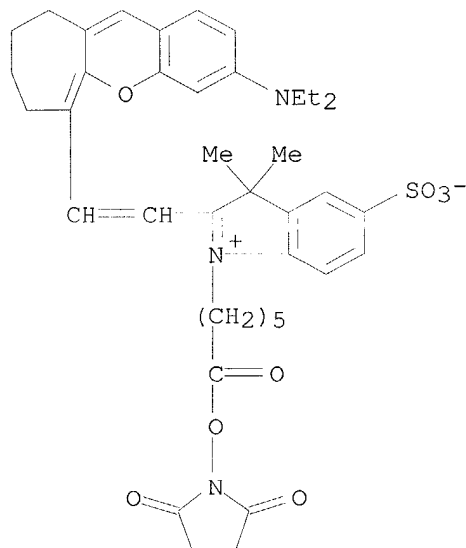
CI COM

SR CA



L24 ANSWER 5 OF 47 REGISTRY COPYRIGHT 2003 ACS

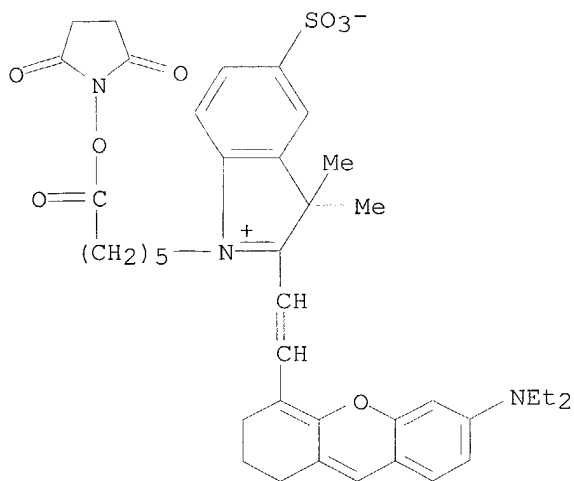
RN 293320-49-7 REGISTRY  
 CN 3H-Indolium, 2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[  
 elpyran-6-yl]ethenyl]-1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-3,3-  
 dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C40 H47 N3 O8 S  
 SR CA  
 LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:239376

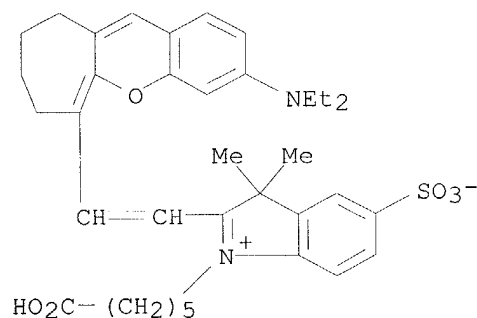
L24 ANSWER 6 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 293320-48-6 REGISTRY  
 CN 3H-Indolium, 2-[2-[6-(diethylamino)-2,3-dihydro-1H-xanthen-4-yl]ethenyl]-1-  
 [6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-3,3-dimethyl-5-sulfo-,  
 inner salt (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C39 H45 N3 O8 S  
 SR CA  
 LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:239376

L24 ANSWER 7 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 293320-47-5 REGISTRY  
CN 3H-Indolium, 1-(5-carboxypentyl)-2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C36 H44 N2 O6 S  
SR CA  
LC STN Files: CA, CAPLUS



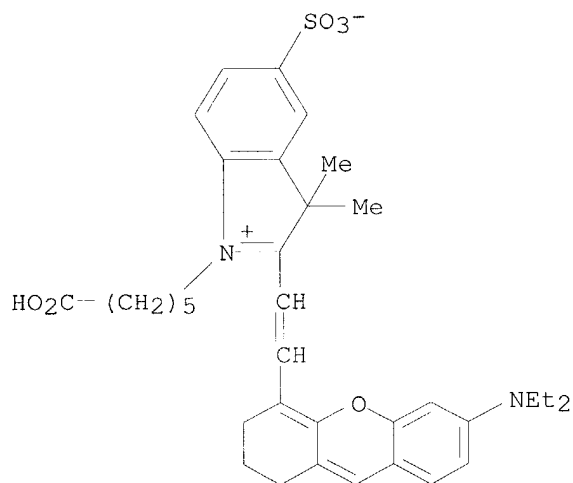
1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:239376

L24 ANSWER 8 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 293320-46-4 REGISTRY  
CN 3H-Indolium, 1-(5-carboxypentyl)-2-[2-[6-(diethylamino)-2,3-dihydro-1H-xanthen-4-yl]ethenyl]-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C35 H42 N2 O6 S



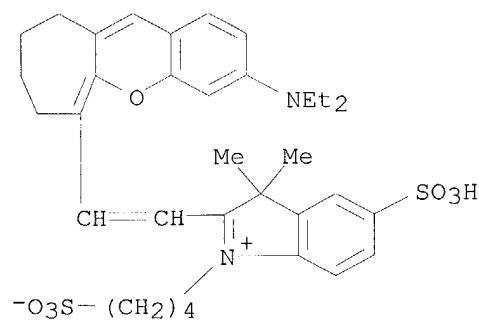
SR CA  
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:239376

L24 ANSWER 9 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 293320-45-3 REGISTRY  
CN 3H-Indolium, 2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfoethyl)-, inner salt, potassium salt (9CI) (CA INDEX NAME)  
MF C34 H42 N2 O7 S2 . K  
SR CA  
LC STN Files: CA, CAPLUS



● K

1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

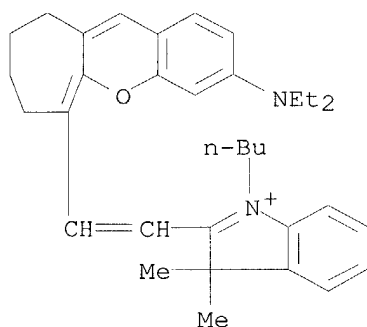
REFERENCE 1: 133:239376

L24 ANSWER 10 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 293320-44-2 REGISTRY  
 CN 3H-Indolium, 1-butyl-2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)  
 MF C34 H43 N2 O . Cl O4  
 SR CA  
 LC STN Files: CA, CAPLUS

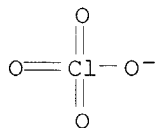
CM 1

CRN 293320-43-1  
 CMF C34 H43 N2 O



CM 2

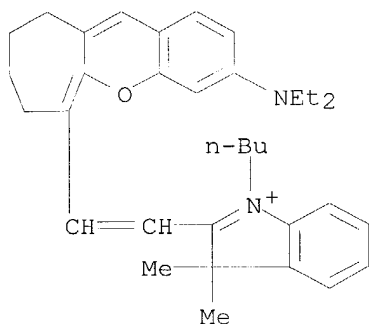
CRN 14797-73-0  
 CMF Cl O4



1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:239376

L24 ANSWER 11 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 293320-43-1 REGISTRY  
 CN 3H-Indolium, 1-butyl-2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-3,3-dimethyl- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C34 H43 N2 O  
 CI COM  
 SR CA



L24 ANSWER 12 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 193958-15-5 REGISTRY

CN Benzo[b]cyclohepta[e]pyran-3-amine, 6-[2-(9-acridinyl)ethenyl]-N,N-diethyl-7,8,9,10-tetrahydro-, monoperchlorate (9CI) (CA INDEX NAME)

OTHER NAMES:

CN L 109

CN L 109 (dye)

MF C33 H32 N2 O . Cl H O4

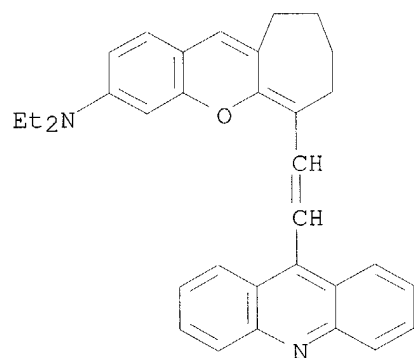
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 160115-50-4

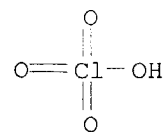
CMF C33 H32 N2 O



CM 2

CRN 7601-90-3

CMF Cl H O4



1 REFERENCES IN FILE CA (1962 TO DATE)

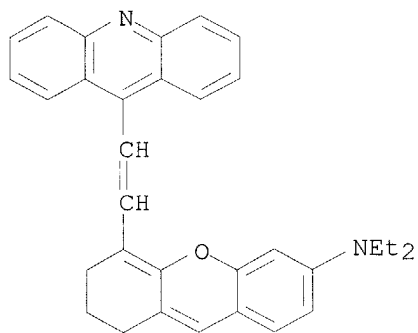
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 127:184914

L24 ANSWER 13 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 181934-43-0 REGISTRY  
 CN 1H-Xanthen-6-amine, 4-[2-(9-acridinyl)ethenyl]-N,N-diethyl-2,3-dihydro-,  
 monoperchlorate (9CI) (CA INDEX NAME)  
 MF C32 H30 N2 O . Cl H O4  
 SR CA  
 LC STN Files: CA, CAPLUS

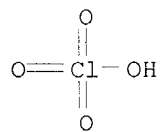
CM 1

CRN 181934-42-9  
 CMF C32 H30 N2 O



CM 2

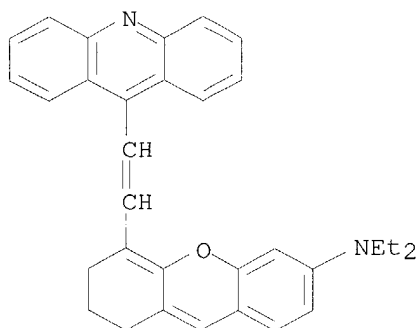
CRN 7601-90-3  
 CMF Cl H O4



1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 125:234265

L24 ANSWER 14 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 181934-42-9 REGISTRY  
 CN 1H-Xanthen-6-amine, 4-[2-(9-acridinyl)ethenyl]-N,N-diethyl-2,3-dihydro-  
 (9CI) (CA INDEX NAME)  
 MF C32 H30 N2 O  
 CI COM  
 SR CA

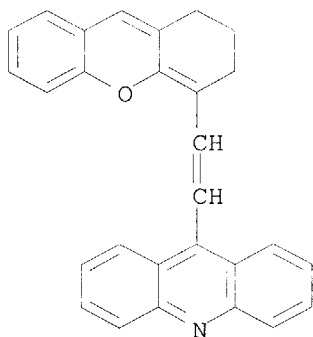


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L24 ANSWER 15 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 181934-41-8 REGISTRY  
 CN Acridine, 9-[2-(2,3-dihydro-1H-xanthen-4-yl)ethenyl]-, perchlorate (9CI)  
 (CA INDEX NAME)  
 MF C28 H21 N O . Cl H O4  
 SR CA  
 LC STN Files: CA, CAPLUS

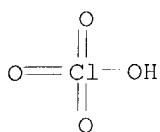
CM 1

CRN 181934-40-7  
 CMF C28 H21 N O



CM 2

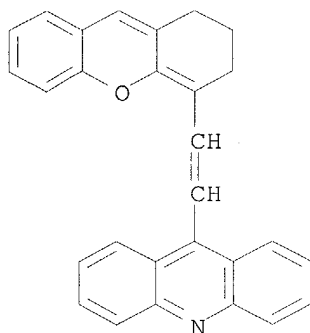
CRN 7601-90-3  
 CMF Cl H O4



1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 125:234265

L24 ANSWER 16 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 181934-40-7 REGISTRY  
CN Acridine, 9-[2-(2,3-dihydro-1H-xanthen-4-yl)ethenyl]- (9CI) (CA INDEX NAME)  
MF C28 H21 N O  
CI COM  
SR CA

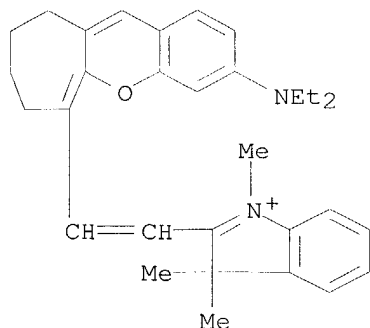


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L24 ANSWER 17 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 177194-48-8 REGISTRY  
CN 3H-Indolium, 2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-1,3,3-trimethyl-, perchlorate (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 3-(Diethylamino)-6-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-7,8,9,10-tetrahydro-6H-benzo[b]cyclohepta[e]pyrylium perchlorate  
MF C31 H37 N2 O . Cl O4  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

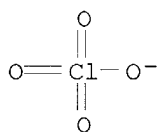
CRN 177194-47-7  
CMF C31 H37 N2 O



CM 2

CRN 14797-73-0

CMF Cl O4



1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 124:346018

L24 ANSWER 18 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 177194-47-7 REGISTRY

CN 3H-Indolium, 2-[2-[3-(diethylamino)-7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-yl]ethenyl]-1,3,3-trimethyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

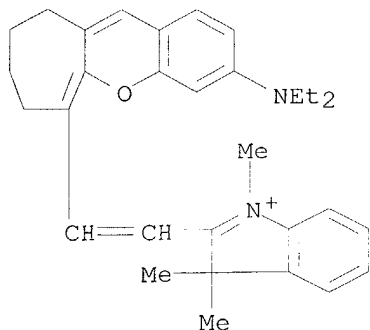
CN 3-(Diethylamino)-6-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-7,8,9,10-tetrahydro-6H-benzo[b]cyclohepta[e]pyrylium

FS 3D CONCORD

MF C31 H37 N2 O

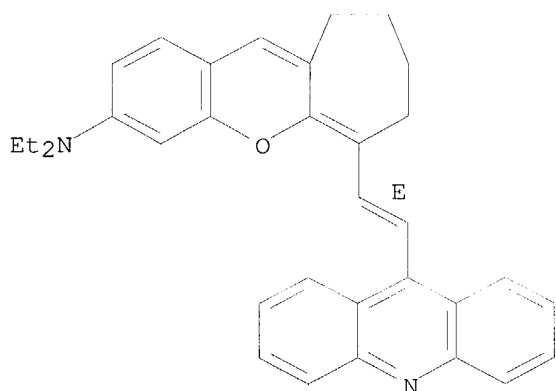
CI COM

SR CA



L24 ANSWER 19 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 170144-10-2 REGISTRY  
 CN Benzo[b]cyclohepta[e]pyran-3-amine, 6-[2-(9-acridinyl)ethenyl]-N,N-diethyl-  
 7,8,9,10-tetrahydro-, conjugate monoacid, (E)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H32 N2 O . H  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER  
 CRN (170143-93-8)

Double bond geometry as shown.



● H<sup>+</sup>

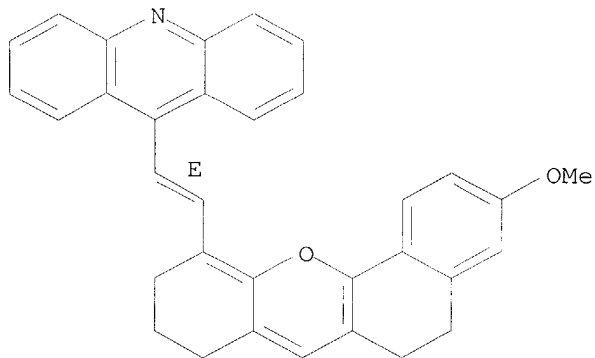
1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 123:328758

L24 ANSWER 20 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 170144-07-7 REGISTRY  
 CN Acridine, 9-[2-(5,8,9,10-tetrahydro-3-methoxy-6H-benzo[c]xanthen-11-yl)ethenyl]-, conjugate monoacid, (E)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H27 N O2 . H  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER  
 CRN (170143-90-5)

Double bond geometry as shown.





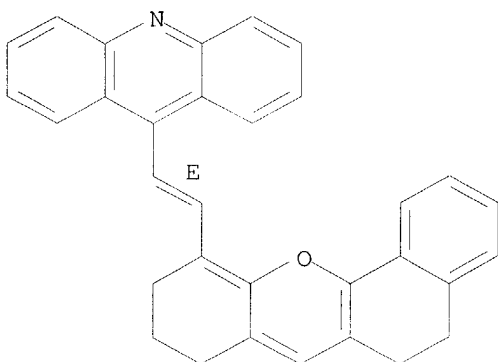
● H<sup>+</sup>

1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 123:328758

L24 ANSWER 21 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 170144-06-6 REGISTRY  
CN Acridine, 9-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]-, conjugate monoacid, (E)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C32 H25 N O . H  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER  
CRN (170143-89-2)

Double bond geometry as shown.



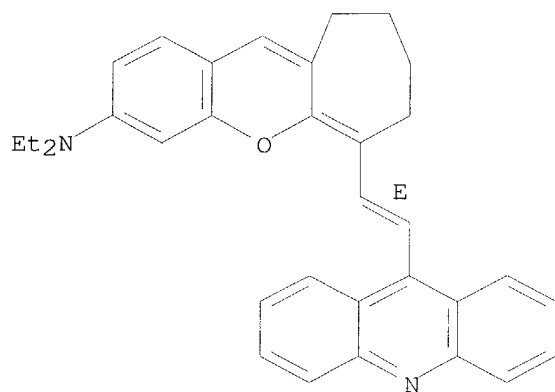
● H<sup>+</sup>

1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 123:328758

L24 ANSWER 22 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 170143-93-8 REGISTRY  
 CN Benzo[b]cyclohepta[e]pyran-3-amine, 6-[2-(9-acridinyl)ethenyl]-N,N-diethyl-  
 7,8,9,10-tetrahydro-, (E)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H32 N2 O  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Double bond geometry as shown.



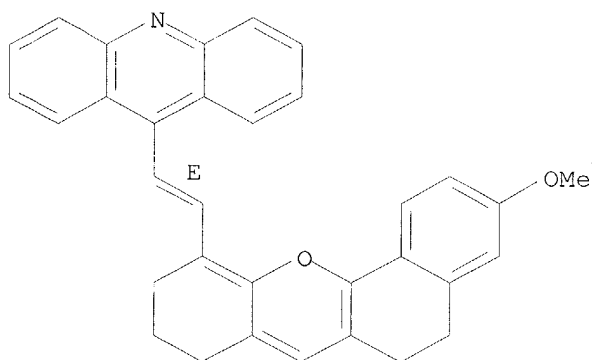
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 123:328758

L24 ANSWER 23 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 170143-90-5 REGISTRY  
 CN Acridine, 9-[2-(5,8,9,10-tetrahydro-3-methoxy-6H-benzo[c]xanthen-11-yl)ethenyl]-, (E)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H27 N O2  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Double bond geometry as shown.



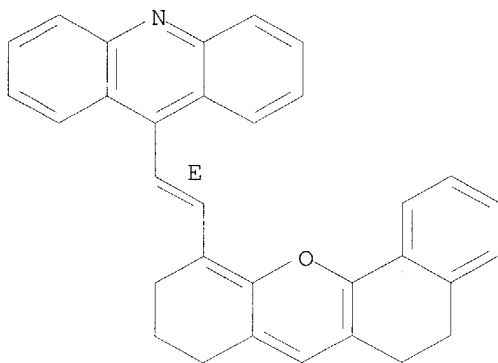
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 123:328758

L24 ANSWER 24 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 170143-89-2 REGISTRY  
CN Acridine, 9-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]-,  
(E)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C32 H25 N O  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

Double bond geometry as shown.



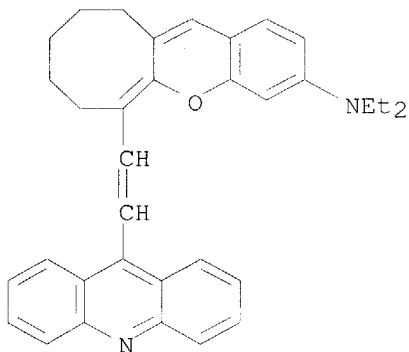
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 123:328758

L24 ANSWER 25 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 163403-80-3 REGISTRY

CN 7H-Benzo[b]cycloocta[e]pyran-3-amine, 6-[2-(9-acridinyl)ethenyl]-N,N-  
diethyl-8,9,10,11-tetrahydro- (9CI) (CA INDEX NAME)  
MF C34 H34 N2 O  
SR CA  
LC STN Files: CA, CAPLUS

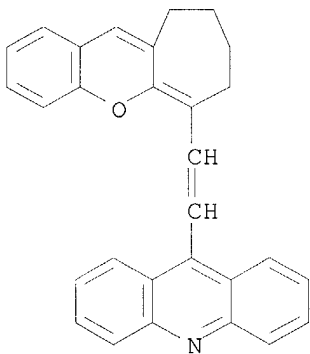


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 122:316900

L24 ANSWER 26 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 163403-75-6 REGISTRY  
CN Acridine, 9-[2-(7,8,9,10-tetrahydrobenzo[b]cyclohepta[e]pyran-6-  
yl)ethenyl]- (9CI) (CA INDEX NAME)  
MF C29 H23 N O  
SR CA  
LC STN Files: CA, CAPLUS



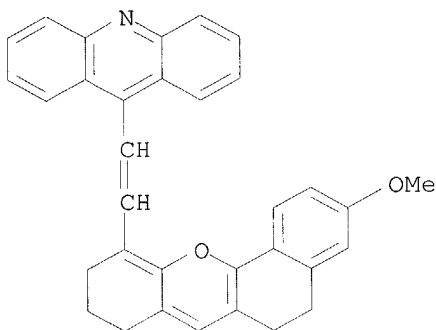
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 122:316900

L24 ANSWER 27 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 163403-63-2 REGISTRY  
 CN Acridine, 9-[2-(5,8,9,10-tetrahydro-3-methoxy-6H-benzo[c]xanthen-11-yl)ethenyl]- (9CI) (CA INDEX NAME)  
 MF C33 H27 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

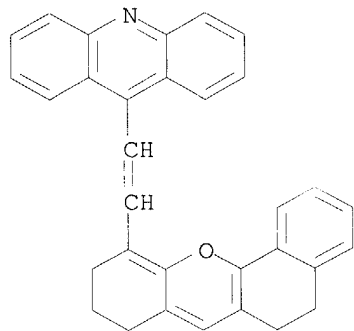


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 122:316900

L24 ANSWER 28 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 163403-60-9 REGISTRY  
 CN Acridine, 9-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]- (9CI) (CA INDEX NAME)  
 MF C32 H25 N O  
 SR CA  
 LC STN Files: CA, CAPLUS

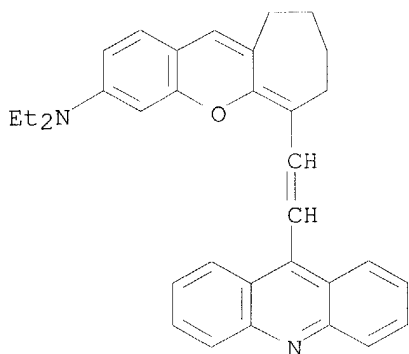


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 122:316900

L24 ANSWER 29 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 160115-50-4 REGISTRY  
 CN Benzo[b]cyclohepta[e]pyran-3-amine, 6-[2-(9-acridinyl)ethenyl]-N,N-diethyl-  
 7,8,9,10-tetrahydro- (9CI) (CA INDEX NAME)  
 MF C33 H32 N2 O  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1962 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

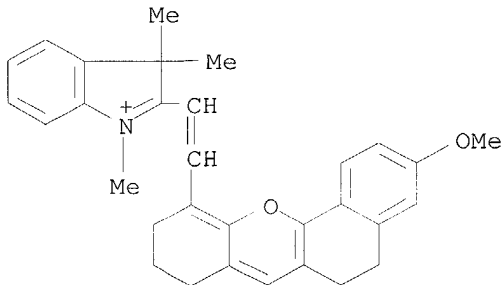
REFERENCE 1: 122:316900

REFERENCE 2: 122:58161

L24 ANSWER 30 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 129490-15-9 REGISTRY  
 CN 3H-Indolium, 1,3,3-trimethyl-2-[2-(5,8,9,10-tetrahydro-3-methoxy-6H-benzo[c]xanthen-11-yl)ethenyl]-, perchlorate (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 6H-Benzo[c]xanthene, 3H-indolium deriv.  
 MF C31 H32 N O2 . Cl O4  
 SR CA  
 LC STN Files: CA, CAPLUS, CHEMINFORMRX

CM 1

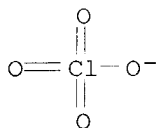
CRN 129490-14-8  
 CMF C31 H32 N O2



CM 2

CRN 14797-73-0

CMF Cl O4



1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 113:134161

L24 ANSWER 31 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 129490-14-8 REGISTRY

CN 3H-Indolium, 1,3,3-trimethyl-2-[2-(5,8,9,10-tetrahydro-3-methoxy-6H-benzo[c]xanthen-11-yl)ethenyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

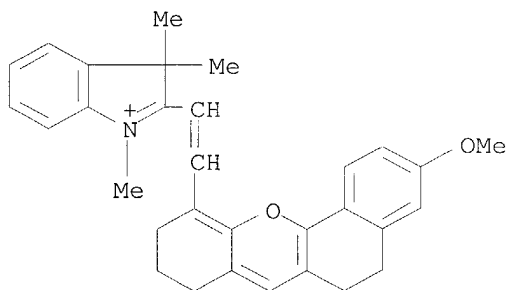
CN 6H-Benzo[c]xanthene, 3H-indolium deriv.

FS 3D CONCORD

MF C31 H32 N O2

CI COM

SR CA



L24 ANSWER 32 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 129296-92-0 REGISTRY

CN 3H-Indolium, 1,3,3-trimethyl-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]-, perchlorate (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 6H-Benzo[c]xanthene, 3H-indolium deriv.

MF C30 H30 N O . Cl O4

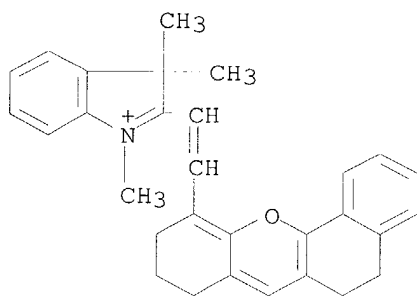
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 129296-91-9

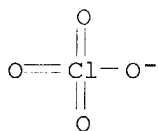
CMF C30 H30 N O



CM 2

CRN 14797-73-0

CMF C1 O4



1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 113:134161

L24 ANSWER 33 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 129296-91-9 REGISTRY

CN 3H-Indolium, 1,3,3-trimethyl-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

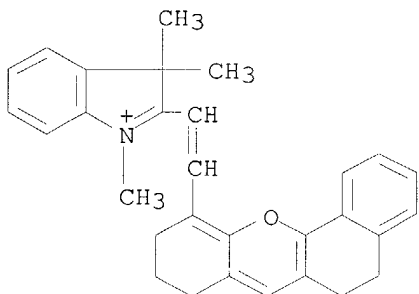
CN 6H-Benzo[c]xanthene, 3H-indolium deriv.

FS 3D CONCORD

MF C30 H30 N O

CI COM

SR CA



L24 ANSWER 34 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 129296-90-8 REGISTRY

CN Quinolinium, 1-(2-hydroxyethyl)-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]-, perchlorate (salt) (9CI) (CA INDEX NAME)

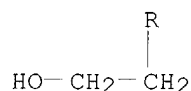
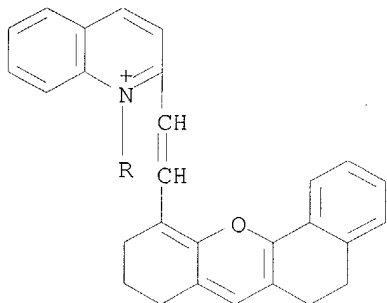


## OTHER CA INDEX NAMES:

CN 6H-Benzo[c]xanthene, quinolinium deriv.  
 MF C30 H28 N O2 . Cl O4  
 SR CA  
 LC STN Files: CA, CAPLUS, CHEMINFORMRX

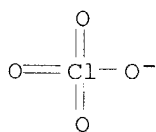
CM 1

CRN 129296-89-5  
 CMF C30 H28 N O2



CM 2

CRN 14797-73-0  
 CMF Cl O4



1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 113:134161

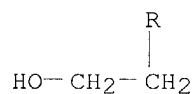
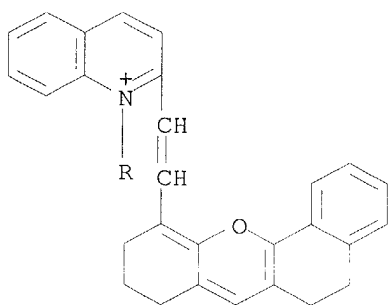
L24 ANSWER 35 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 129296-89-5 REGISTRY

CN Quinolinium, 1-(2-hydroxyethyl)-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]- (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

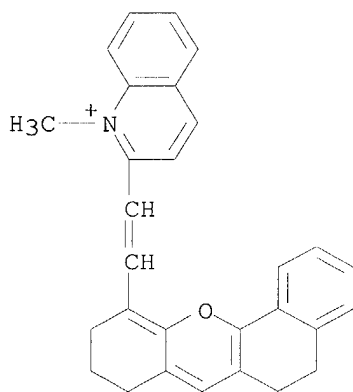
CN 6H-Benzo[c]xanthene, quinolinium deriv.  
 FS 3D CONCORD  
 MF C30 H28 N O2  
 CI COM  
 SR CA



L24 ANSWER 36 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 129296-88-4 REGISTRY  
 CN Quinolinium, 1-methyl-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]-, perchlorate (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 6H-Benzo[c]xanthene, quinolinium deriv.  
 MF C29 H26 N O . Cl O4  
 SR CA  
 LC STN Files: CA, CAPLUS

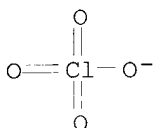
CM 1

CRN 129296-87-3  
 CMF C29 H26 N O



CM 2

CRN 14797-73-0  
 CMF Cl O4



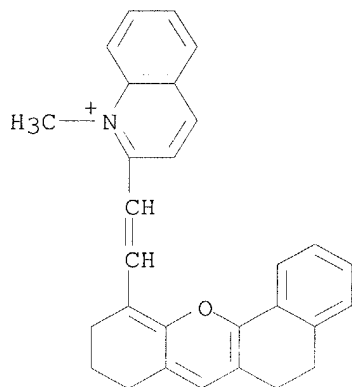
1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 113:134161

L24 ANSWER 37 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 129296-87-3 REGISTRY  
CN Quinolinium, 1-methyl-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 6H-Benzo[c]xanthene, quinolinium deriv.  
FS 3D CONCORD  
MF C29 H26 N O  
CI COM  
SR CA



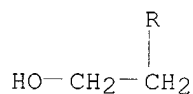
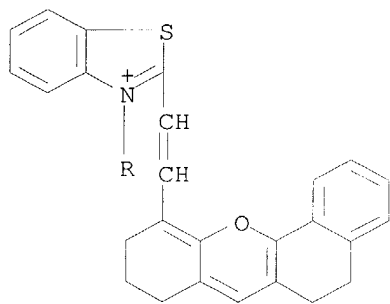
L24 ANSWER 38 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 129296-86-2 REGISTRY  
CN Benzothiazolium, 3-(2-hydroxyethyl)-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]-, perchlorate (salt) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 6H-Benzo[c]xanthene, benzothiazolium deriv.  
MF C28 H26 N O2 S . Cl O4  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

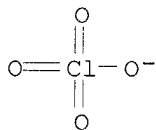
CRN 129296-85-1  
CMF C28 H26 N O2 S



CM 2

CRN 14797-73-0

CMF C1 O4



1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 113:134161

L24 ANSWER 39 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 129296-85-1 REGISTRY

CN Benzothiazolium, 3-(2-hydroxyethyl)-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

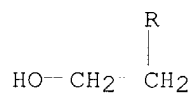
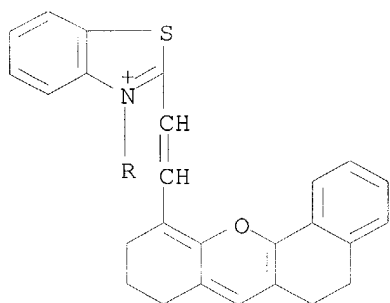
CN 6H-Benzo[c]xanthene, benzothiazolium deriv.

FS 3D CONCORD

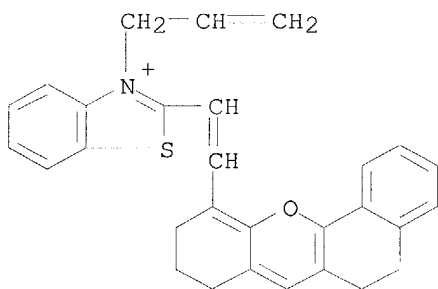
MF C28 H26 N O2 S

CI COM

SR CA



L24 ANSWER 40 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 129296-84-0 REGISTRY  
 CN Benzothiazolium, 3-(2-propenyl)-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]-, bromide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 6H-Benzo[c]xanthene, benzothiazolium deriv.  
 MF C29 H26 N O S . Br  
 SR CA  
 LC STN Files: CA, CAPLUS

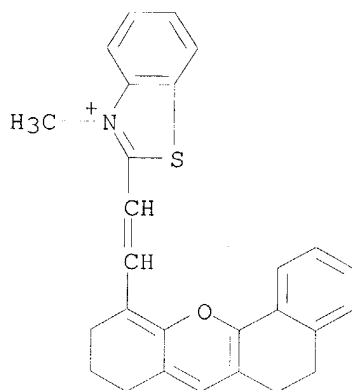


1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

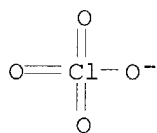
REFERENCE 1: 113:134161

L24 ANSWER 41 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 129296-83-9 REGISTRY  
 CN Benzothiazolium, 3-methyl-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]-, perchlorate (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 6H-Benzo[c]xanthene, benzothiazolium deriv.  
 MF C27 H24 N O S . Cl O4

SR CA  
 LC STN Files: CA, CAPLUS, CHEMINFORMRX  
 CM 1  
 CRN 129296-82-8  
 CMF C27 H24 N O S



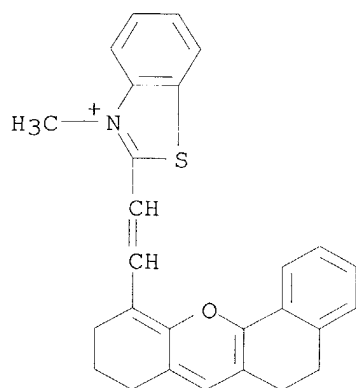
CM 2  
 CRN 14797-73-0  
 CMF Cl O4



1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 113:134161

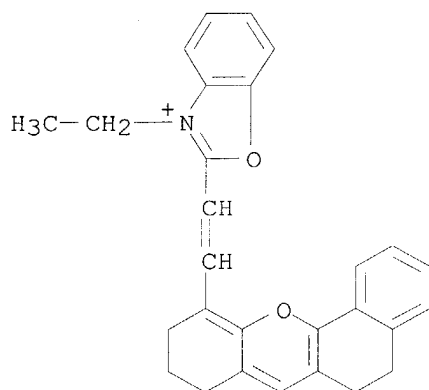
L24 ANSWER 42 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 129296-82-8 REGISTRY  
 CN Benzothiazolium, 3-methyl-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 6H-Benzo[c]xanthene, benzothiazolium deriv.  
 FS 3D CONCORD  
 MF C27 H24 N O S  
 CI COM  
 SR CA



L24 ANSWER 43 OF 47 REGISTRY COPYRIGHT 2003 ACS  
 RN 129296-81-7 REGISTRY  
 CN Benzoxazolium, 3-ethyl-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]-, perchlorate (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 6H-Benzo[c]xanthene, benzoxazolium deriv.  
 MF C28 H26 N O2 . Cl O4  
 SR CA  
 LC STN Files: CA, CAPLUS, CHEMINFORMRX

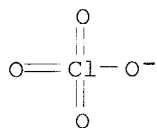
CM 1

CRN 129296-80-6  
 CMF C28 H26 N O2



CM 2

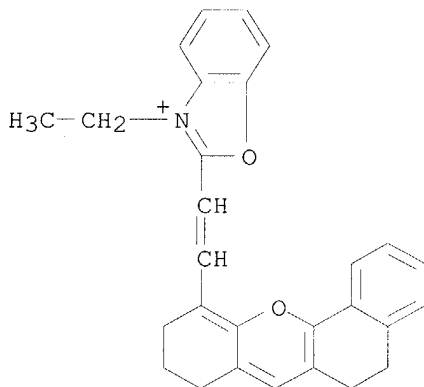
CRN 14797-73-0  
 CMF Cl O4



1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 113:134161

L24 ANSWER 44 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 129296-80-6 REGISTRY  
CN Benzoxazolium, 3-ethyl-2-[2-(5,8,9,10-tetrahydro-6H-benzo[c]xanthen-11-yl)ethenyl]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 6H-Benzo[c]xanthene, benzoxazolium deriv.  
FS 3D CONCORD  
MF C28 H26 N O2  
CI COM  
SR CA

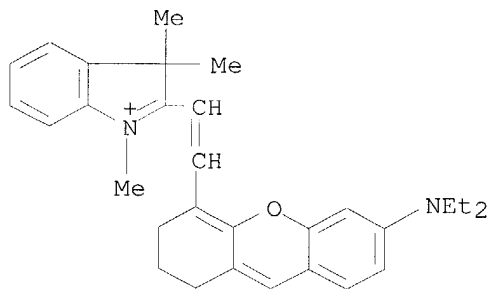


L24 ANSWER 45 OF 47 REGISTRY COPYRIGHT 2003 ACS  
RN 99309-28-1 REGISTRY  
CN 3H-Indolium, 2-[2-[6-(diethylamino)-2,3-dihydro-1H-xanthen-4-yl]ethenyl]-1,3,3-trimethyl-, perchlorate (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN CZ 682  
DR 177194-46-6  
MF C30 H35 N2 O . Cl O4  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 99309-27-0  
CMF C30 H35 N2 O

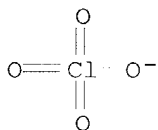




CM 2

CRN 14797-73-0

CMF Cl O4



2 REFERENCES IN FILE CA (1962 TO DATE)

2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 124:346018

REFERENCE 2: 104:98943

L24 ANSWER 46 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 99309-27-0 REGISTRY

CN 3H-Indolium, 2-[2-[6-(diethylamino)-2,3-dihydro-1H-xanthen-4-yl]ethenyl]-1,3,3-trimethyl- (9CI) (CA INDEX NAME)

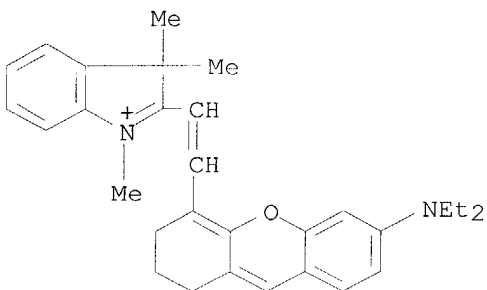
FS 3D CONCORD

DR 177194-45-5

MF C30 H35 N2 O

CI COM

SR CA



L24 ANSWER 47 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 1872-25-9 REGISTRY

CN 5H-Benzo[6,7]cyclohepta[1,2-b]quinolinium, 6,7-dihydro-8-[3-(5,6,7,13-

tetrahydro-13-methyl-8H-benzo[6,7]cyclohepta[1,2-b]quinolin-8-ylidene)-1-propenyl]-, iodide (9CI) (CA INDEX NAME)

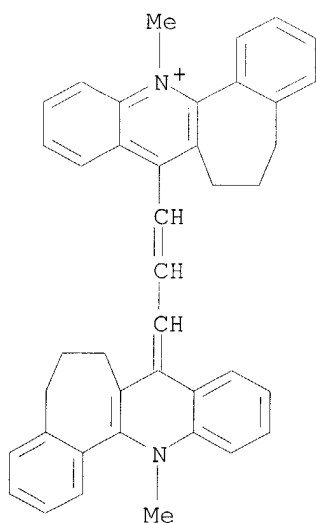
OTHER CA INDEX NAMES:

CN 6,7-Dihydro-13-methyl-8-[3-(5,6,7,13-tetrahydro-13-methyl-8H-benzo[6,7]-cyclohepta[1,2-b]quinolin-8-ylidene)propenyl]-5H-benzo[6,7]cyclohepta[1,2-b]quinolinium iodide (7CI)

CN 8H-Benzo[6,7]cyclohepta[1,2-b]quinoline, 5H-benzo[6,7]cyclohepta[1,2-b]quinolinium deriv.

MF C41 H37 N2 . I

LC STN Files: CAOLD



• I<sup>-</sup>

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)